

1 REMARKS

2 Status of the Claims

3 Claims 34-35, 37-40, 42-44, 46, 49-51, 54, 56-58, and 60-61 are pending in the present
4 application, Claims 1-33, 36, 41, 45, 47, 48, 52, 53, 55 and 59 having been previously canceled
5 Claims 34, 42, 54, 56, 60 and 61 have been amended to more clearly define the invention, and
6 Claim 46 has been amended to correct a typographical error.

7 Claims Rejected Under 35 U.S.C. 103(a)

8 The Examiner has rejected Claims 34, 35, 37-40, 42-44, 46, 49-51, 54, 56-58, and 60-61
9 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,981,956 (Stern) in view of U.S.
10 Patent Publication No. 2002/0008191 (Faska et al. – hereinafter referred to as “Faska”).

11 In the interest of reducing the complexity of the issues for the Examiner to consider in this
12 response, the following discussion focuses on independent Claims 34, 42, 54, 56, 60, and 61. The
13 patentability of each remaining dependent claim is not necessarily separately addressed in detail.
14 However, applicants’ decision not to discuss the differences between the cited art and each dependent
15 claim should not be considered as an admission that applicants concur with the Examiner’s conclusion
16 that these dependent claims are not patentable over the disclosure in the cited references. Similarly,
17 applicants’ decision not to discuss differences between the prior art and every claim element, or every
18 comment made by the Examiner, should not be considered as an admission that applicants concur with
19 the Examiner’s interpretation and assertions regarding those claims. Indeed, applicants believe that all
20 of the dependent claims patentably distinguish over the references cited. In any event, a specific
21 traverse of the rejection of each dependent claim is not required, since dependent claims are patentable
22 for at least the same reasons as the independent claims from which the dependent claims ultimately
23 depend.

24 Patentability of Independent Claims 34, 42, 54, 56, 60, and 61

25 Significant differences exist between the recited subject matter and the cited art because the
26 cited art does not teach or suggest that images of the object are dispersed across the detector, so that
27 pixels of different images corresponding to an identical portion of the object are not coincident. This
28 concept is best illustrated in FIGURE 3 of the pending application.

29 Referring to FIGURE 3, note that an object 316 includes a plurality of features 320, 322, 324,
30 and 326. Probes have been attached to each different feature. Significantly, the probe attached to

1 feature 320 includes four different optical signaling components; a blue component, a green
2 component, a yellow component, and a red component. Note that an image of feature 320 appears in
3 the blue channel, the green channel, the yellow channel, and the red channel of the detector, where
4 each different spectral channel of the detector is dispersed onto a different portion of the detector. In
5 other words, four different spectral images of feature 320 are dispersed across four different distinct
6 portions of the detector. Significantly, even though the red image of feature 320 and the yellow
7 image of feature 320 are specifically corresponding to the same portion of object 316 (i.e., they are
8 both images of feature 320), the red image and the yellow image *are not coincident* on the detector.

9 With respect to the cited art, Stern teaches that light should be spectrally dispersed across a
10 plurality of different detectors. Faska discloses a detector that is capable of simultaneously detecting
11 two or more selected wavelengths of light on a pixel registered basis. It must be recognized that the
12 pixel registered basis noted by Faska represents ensuring that pixels corresponding to the same
13 portion of an object *are coincident* on Faska's detector. This is achieved by stacking different
14 detection elements on top of each other. Faska's detector is multi-layered. If Faska's detector were
15 used to image object 316 of applicants' FIGURE 3, then the red image and yellow image (assuming
16 for the moment that Faska's detector is responsive only do two different wavelengths) of feature 320
17 would be coincident on the detector (they would be stacked one on top of another). This is
18 distinguishably different than what applicants have claimed. While variations in language have been
19 employed in each independent claim, each independent claim distinguishes over the cited art for
20 substantially the same reason (that applicants spectrally disperse a plurality of different images across
21 different portions of the detector, and according to Faska, light is not spectrally dispersed across
22 different portions of the detector, rather different spectrums of light are detected by different layers of
23 the detector, where light corresponding to a specific part of an object is detected by different layers
24 that are coincident on the detector). If additional distinguishing language is required, applicants can
25 further amend the claims to recite that the images are laterally dispersed across the detector (noting
26 that Faska's detector responds to different wavelengths at different depths, depth being
27 distinguishable from different lateral positions).

28 The cited art simply does not teach or suggest modifying Faska's single detector to function in
29 an equivalent manner. Accordingly, all of the claims now remaining in the application define
30 patentable subject matter that is neither anticipated nor obvious in view of the prior art cited. Since

1 dependent claims inherently include all of the recitation of the independent claim on which they
2 ultimately depend, for at least the same reasons as noted above in connection with the independent
3 Claims, the rejection of the dependent Claims should also be withdrawn.

4 The Examiner is thus requested to pass the present application to issue in view of the
5 amendments and the remarks submitted above. If there are any questions that might be addressed by
6 a further telephone interview, the Examiner is invited to telephone the undersigned attorney, at the
7 number listed below.

8 Respectfully submitted,

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